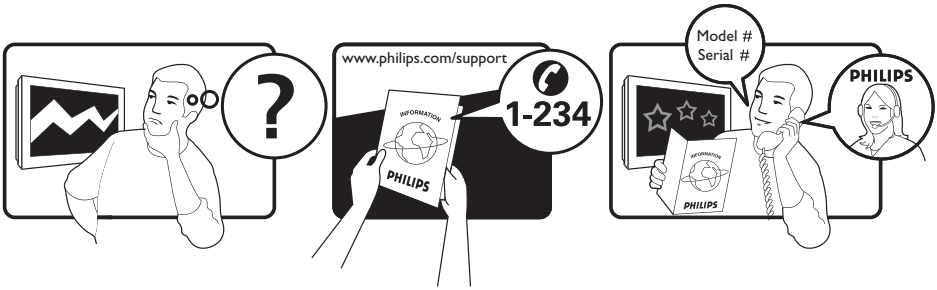
FLAT TV™

www.philips.com/support

EN USER MANUAL

PHILIPS



Country	Number	Tariff
Austria	0810 000205	€0.07/min
Belgium	078250145	€0.06/min
Czech Rep	800142840	free
Denmark	3525 8759	local
Finland	09 2311 3415	local
France	0821 611655	€0.09/min
Germany	01803 386 852	€0.09/min
Greece	0 0800 3122 1280	free
Hungary	0680018189	free
Ireland	01 601 1777	local
Italy	840320086	€0.08/min
Luxemburg	40 6661 5644	local
Netherlands	0900 8407	€0.10/min
Norway	2270 8111	local
Poland	0223491504	local
Portugal	2 1359 1442	local
Slovakia	0800004537	free
Spain	902 888 784	€0.10/min
Sweden	08 5792 9100	local
Switzerland	0844 800 544	local
UK	0870 900 9070	local

This information is correct at the time of press.

For updated information, see www.support.philips.com

Recycling

The packaging of this product is intended to be recycled. Apply to the local authorities for correct disposal.

Disposal of your old product

Your product is designed and manufactured with highly quality material and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC.

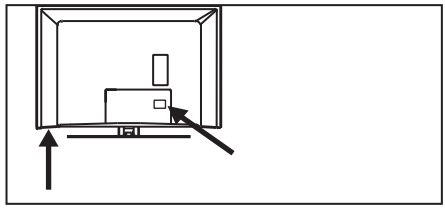
Please inform yourself about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

Disposal of batteries

The batteries supplied do not contain the heavy metals mercury and cadmium. Please check on how to dispose of exhausted batteries according to local regulations.

Product information

The model and serial number can be found at the rear of the TV and on the packaging. For a larger TV, information is also on left hand underside of the TV.



- Standby power consumption is less than 1W.
- The power consumption of the set is given on the type plate at the rear of the TV.
- For more product specifications, see the product leaflet on www.philips.com/support.

Note: specifications and information are subject to change without notice.

For further assistance call the customer support service in your country. The corresponding telephone numbers and addresses are given in the supplied worldwide guarantee booklet.

Information for Users in the UK

This information is specific to the UK. If you are using your TV in the UK, use this information in conjunction with the rest of this manual.

Positioning the TV

For the best results, choose a position where light does not fall directly on the screen, and at some distance away from radiators or other sources of heat. Leave a space of at least 5cm around the TV for ventilation. Ensure that curtains, cupboards and other items cannot obstruct the air flow through the ventilation apertures. The TV is intended for use in a domestic environment only and should never be operated or stored in excessively hot or humid atmospheres.

Interference

The Department of Trade and Industry operates a Radio Interference Investigation Service to help TV licence holders improve reception of BBC and IBA programmes where they are being spoilt by interference. If your dealer cannot help, ask at a main Post Office for the booklet "*How to Improve Television and Radio Reception*".

Mains Connection

Before connecting the TV to the mains, check that the mains supply voltage corresponds to the voltage printed on the type plate on the rear panel of the TV. If the mains voltage is different, consult your dealer.

Important

This apparatus is fitted with an approved moulded 13 AMP plug. Should it become necessary to replace the mains fuse, this must be replaced with a fuse of the same value as indicated on the plug.

1. Remove fuse cover and fuse.

2. Replace the fuse.
   The replacement fuse must comply with BS 1362 and have the ASTA approval mark. If the fuse is lost, contact your retailer in order to verify the correct type.

3. Refit the fuse cover.
   If for any reason the fitted plug is not suitable for your socket outlet, consult your retailer or a qualified electrician before proceeding with the installation.

Connecting the Aerial

The aerial should be connected to the socket marked : at the back of the set. An inferior aerial is likely to result in a poor, perhaps unstable picture with ghost images and lack of contrast. Make-shift loft or set-top aerials are often inadequate. Your dealer will know from experience the most suitable type for your locality. Should you wish to use the set in conjunction with other equipment, which connects to the aerial socket such as TV games, or a video camera it is recommended that these be connected via a combiner unit to avoid repeated connection and disconnection of the aerial plug.

Fitting the Stand (If Provided)

Use only the stand provided with the set. Ensure that the fixings are properly tightened. A diagram showing how to assemble the stand is packed with the stand. Never use a make-shift stand, or legs fixed with screws.

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1 Introduction

Thank you for purchasing this TV. This manual contains information about how to install and operate your TV.

If this instruction manual does not answer your problem or if the troubleshooting page does not solve your problem, call your local Philips customer or service centre. See the supplied worldwide guarantee booklet for details. Please have the model and product number ready, before calling the Philips customer support service. The model and product number can be found at the back or bottom of your TV, or on the packaging.

Stationary Images

A characteristic of LCD and Plasma Panels is that displaying the same image for a long time can cause a permanent after-image to remain on the screen. This is called phosphor burn in. Normal use of the TV should involve the showing of pictures that contain constantly moving and changing images that fill the screen. The following list gives some examples of stationary images that you may encounter others in your viewing:

- TV and DVD menus: listings of DVD disk content.
- Black bars: when black bars appear at the left and right side of the screen, it is recommended to change to a picture format so that the picture fills the entire screen.
- TV channel logos: logos present a problem if they are bright and stationary. Moving or low-contrast graphics are less likely to cause uneven aging of the screen.
- Stock market stickers: presented at the bottom of the TV screen.
- Shopping channel logos and pricing displays: bright and shown constantly or repeatedly in the same location on the TV screen.
- Examples of still pictures also include logos, computer images, time display, teletext and images displayed in 4:3 mode, static images or characters, etc.

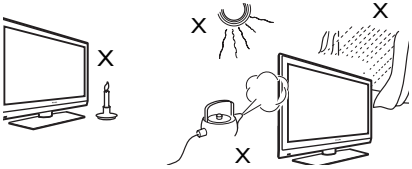
TIP: Reduce contrast and brightness when viewing.

Electric, Magnetic and Electromagnetic Fields (“EMF”)

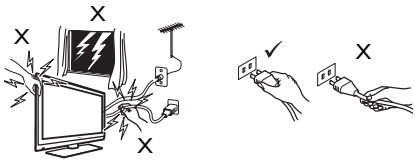
- Royal Philips Electronics manufactures and sells many products targeted at consumers, which, like any electronic apparatus, in general have the ability to emit and receive electromagnetic signals.
- One of Philips’ leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the EMF standards applicable at the time of producing the products.
- Philips is committed to develop, produce and market products that cause no adverse health effects.
- Philips confirms that if its products are handled properly for their intended use, they are safe to use according to scientific evidence available today.
- Philips plays an active role in the development of international EMF and safety standards, enabling Philips to anticipate further developments in standardization for early integration in its products.

2 Safety

1. Two people are required to lift and carry a TV that weighs more than 25kg. Improper handling of the TV can cause serious injury.
2. If you place the TV set on a surface, ensure the surface is level and that it can withstand the weight of the TV.
3. If you wish to hang your TV on a wall, do not hang the TV yourself. Your TV must be hung by qualified technician. Improper hanging can cause the TV to be unsafe.
4. Before you hang your TV on a wall, ensure the wall is suitable to carry the weight of the TV.
5. The connections do not have to be made before you hang the TV, but the cables must be inserted into the TV.
6. Wherever you place or hang the TV, ensure that air can circulate freely through the ventilation slots. Do not position the TV in a confined space.
7. If the TV is mounted on a swivel base or swivel arm, ensure no strain is placed on the power cord when the TV is swivelled. Strain on the power cord can loosen connections and cause arcing or fire.
8. Do not place naked flame sources such as lighted candles close to the TV set.
9. Do not place a vase filled with water on top of or near the TV. Spilling water into the TV can result in electric shock. Do not operate the TV if water is spilled into the set. Unplug the power cord from the mains immediately and have the set checked by a qualified technician.
10. Do not expose the TV or the batteries of the remote control to heat, direct sunlight, rain or water.



11. Do not touch any part of the TV, power lead, or aerial lead during lightning storms.
12. Do not leave the TV in standby mode for an extended period of time. Instead, disconnect the TV from the mains.
13. Pull the power lead by the plug. Do not pull on the power lead. Do not use a poor fitting mains socket. Insert the plug fully into the mains. If it is loose, it may cause arcing and result in fire.



14. Do not connect too much equipment to the same mains socket. Excess equipment can cause overloading and result in fire or electric shock.

Caring for the screen

1. Do not remove the protective sheet until you have completed the stand or wall mounting and connections. Please handle with care.
2. Use only a soft cloth to clean the front of the TV.
3. Do not use a cloth that is dripping with water. Do not use acetone, toluene or alcohol to clean the TV. As a safety precaution, unplug the power cord from the mains when you clean the set.
4. Do not touch, push or rub or strike the screen with anything hard as this may scratch or damage the screen permanently.

3 Television Controls and Connectors

Side or top controls

Use the side or top keys to control the power, menu, volume and programme number.

1. ⏻ POWER
   Switch the TV on and off. For zero power, remove the mains cord from the mains socket.

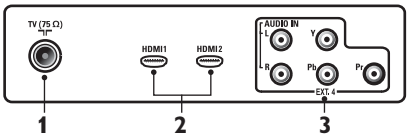
2. - PROGRAM +
   Select the channel.

3. MENU
   Display or close menus. The PROGRAM – / + keys can be used to select a menu item and the VOLUME – / + keys can be used to enter into the selected menu item and make adjustments.

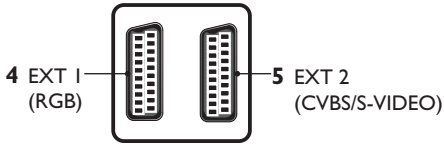
4. - VOLUME +
   Make the volume louder or quieter.

Rear connectors

The rear connectors are located on the rear of the TV and face downward.



The following connectors are located on the rear of the TV.



1. TV aerial socket
   Insert the aerial plug into the TV aerial socket.

2. HDMI 1 / HDMI 2
   To connect to a set-top box, DVD player/recorder, high-definition equipment or personal computer.

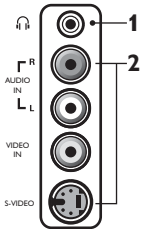
3. EXT4 (YPbPr)
   To connect to peripheral equipment.

4. EXT 1 (RGB)
   To connect to peripheral equipment.

5. EXT 2 (CVBS/S-VIDEO)
   To connect to peripheral equipment.

Side connectors (EXT3)

These connectors are on the side of the TV.



1. Headphone
   Connect your headphone jack to the headphone connector of the TV.

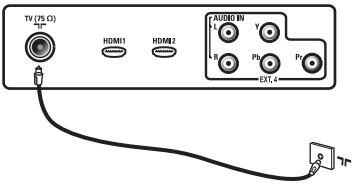
2. Audio Video
   To connect devices such as cameras or camcorders.

4 Getting Started

Warning: The connections do not have to be made before hanging the TV, but the cables must be inserted into connectors of the TV.

Connecting the aerial

Insert the aerial plug firmly into the 75 ohms aerial socket at the bottom of the TV and in the wall aerial socket.



Connecting and disconnecting the mains

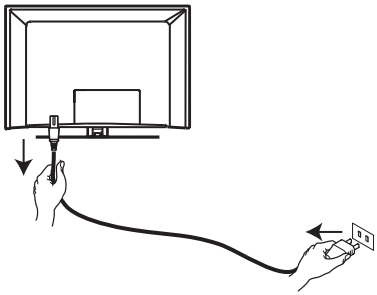
Warning: Plasma TV is a Class 1 apparatus. It must be connected to a mains socket out with a protective earthing connection.

Warning: Verify that the mains supply voltage in your home corresponds to the voltage printed on the sticker at the rear of the TV.

To connect the TV to the mains, insert the appliance coupler on the mains cord into the mains inlet at the back of the TV, and inert the mains plug into the wall socket.

The appliance coupler of the mains cord on the TV is the disconnect device.

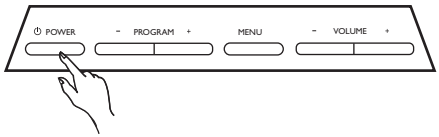
To disconnect the TV from the mains, remove the appliance coupler on the mains cord from the back of the TV or remove the mains plug from the wall socket. For information, see the following illustration.



Switching the TV on

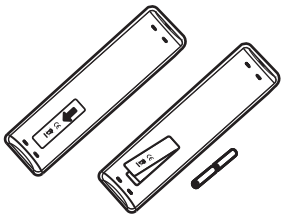
To switch on the TV, press the POWER key on the side or top of the set. A blue or green indicator comes on and after a few seconds, the screen lights up at the left and bottom of the front of the set.

If the TV set remains in standby mode (red indicator), press the - PROGRAM + key on the side or top controls or the - P + key on the remote control.

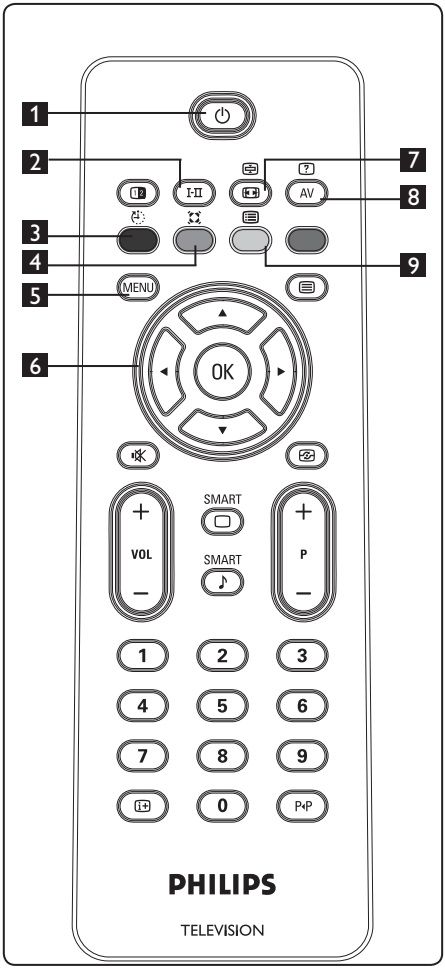


Using the remote control

Insert the 2 supplied batteries into the remote control. Ensure that the + and - ends of the batteries are aligned as shown inside the remote control case.



5 Remote Control



1. **Standby** ⏻
   To set the TV to standby mode. To switch the TV on from standby, press one of the following keys: ⏻, 0 to 9, P +/-, or (AV).
   When the TV is switched on from standby, the last viewed mode is displayed

2. Sound mode (I-II)
   Forces programmes in Stereo and Nicam Stereo to Mono. For bilingual programmes, select Dual I or Dual II (as indicated on the screen during such broadcasts). The Mono indication shows up in red when in forced position.

3. Sleep
   To switch off TV to standby at a specified time (see page 14).

4. Surround Sound
   To turn on/off the surround sound effect. In stereo, this gives the impression that the speakers are further apart.

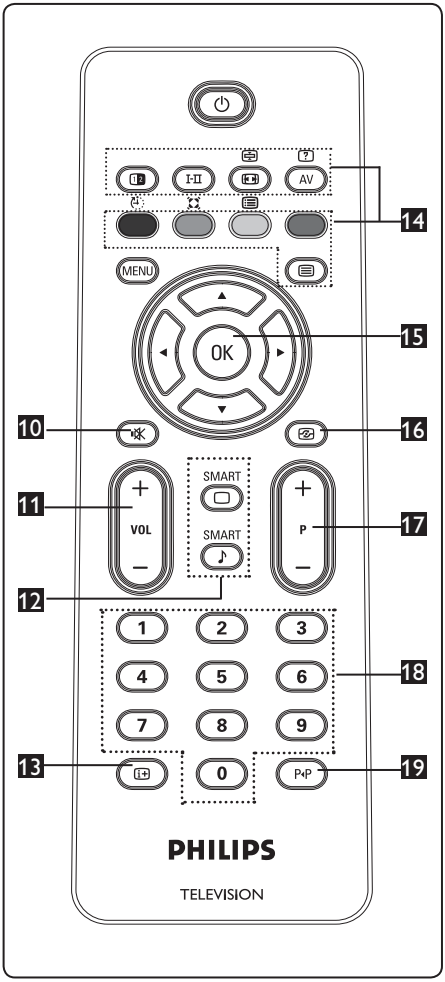
5. MENU (MENU)
   To call up or exit the TV menus.

6. Cursors Up/Down/Left/Right (▲ ▼ ► ◄) These 4 keys select and adjust menu items.

7. Picture format
   (see page 19).

8. Display source list
   Used to select TV or peripheral equipment on EXT 1, EXT 2, EXT 3, EXT 4, HDMI 1 or HDMI 2). Use the ▲ ▼ keys to select source and the ► / (OK) key to confirm your selection.

9. Programme List
   To display / exit the list of programmes. Use the ▲ ▼ keys to select a programme and the ► / (OK) key to display it.



10. Mute
    Turn sound on or off.

11. Volume (+ VOL –)
    To change sound to be louder or quieter.

12. Smart Picture /Sound SMART SMART
    Accesses a series of predefined picture and sound settings (see page 18).

13. On-Screen information
    Press to display (when available) information about the selected TV channel and programme.

14. Teletext
    (See pages 20-21).

15. OK OK
    Confirms selection.

16. Active Control
    Automatically adjusts the picture setting for optimal picture quality continuously under any signal conditions. (See page 16).

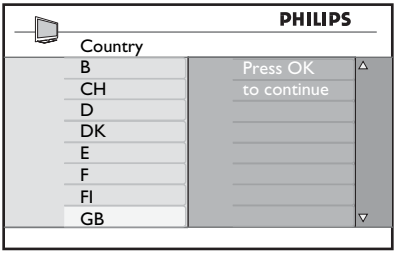
17. Programme (+ P –)
    Selects next or previous available channel/source.

18. Numerical keys 0 / 9
    For direct access to programmes. For a two digit programme number, the 2nd digit must be entered shortly after the first digit, before the dash disappears.

19. Previous/Present programme P↩P
    To alternate between the last viewed and the current programme.

6 Quick Installation

When you switch on the TV set for the first time, a menu is displayed on screen. This menu prompts you to select the country of your choice.



Note: If the above menu is not displayed, proceed to do the installation of channels by the Auto Store method (see page 9). If above menu is displayed, proceed to the following steps:

Press the ▲ ▼ keys on the remote control to select your country. If your country does not appear in the list, select ". . . " . Refer to the "Reference table of countries" on page 33.

1. Press the ► / (OK) key to select the language mode.

2. Select your language by using the ▲ ▼ keys.

3. Press the ► / (OK) key to start search.

   The search starts automatically. All the available TV programmes will be stored. This operation takes a few minutes.

   The display shows the progress of the search and the number of programmes found.

Important : To exit or interrupt the search before it is completed, press the menu key. If you interrupt search during auto store, not all channels will be stored. To store all channels, you must perform a complete auto store search again.

ATS (Automatic Tuning System)

If the transmitter or cable network sends the automatic sort signal, the programmes are numbered correctly. In this case, the installation is complete.

If the transmitter or cable network does not send the automatic sort signal, the programmes are not numbered correctly. You can use the **Sort** menu to number the programmes.

ACI (Automatic Channel Installation)

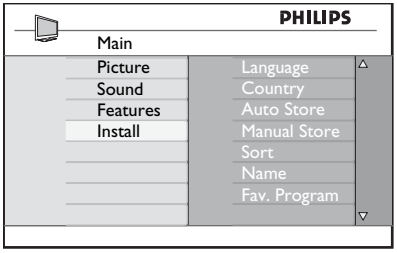
If a cable system or a TV channel which broadcasts ACI is detected, a programme list appears. Without ACI broadcast, the channels are numbered according to your language and country selection. You can use the **Sort** menu to renumber the channels.

7 Auto Store

Before you automatically store channels select your country and language.

1. Press the MENU key.

2. Press the ▲ ▼ key repeatedly to select Install, and press the ▶ / OK key to enter the Install menu.

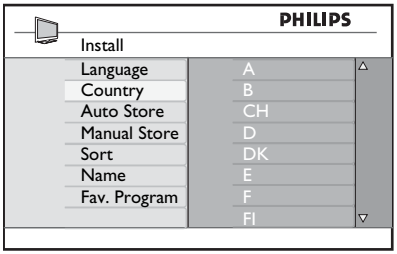


3. Press the ▶ key to enter Language.

4. Press the ▲ ▼ key to select the language of your choice, and press the ▶ / OK key to confirm your selection.

5. Press the ◀ key to return to the previous menu.

6. Press the ▲ ▼ key to select **Country** If your country does not appear in the list, select "... ". Refer to *Reference table of countries*" on page 33.
   The language and country can be selected in TV mode only. If you are in another mode, such as EXT, follow these steps:



7. Press the ▶ / OK key to confirm your selection. You can now store channels automatically.

8. Press the ◀ key to return to the menu.

9. Press the ▲ ▼ keys repeatedly to select Auto Store.

10. Press the ▶ / OK key to start automatic searching for channels. All of the available channels are stored. The operation takes a few minutes.

    To exit or interrupt the search before it is complete, press the MENU key. If you interrupt a search during auto store, not all channels are stored. To store all channels, you must perform a new auto store search.

Note: If you have selected the wrong language and do not understand the language to operate the set, perform the following steps to bring you back to your preferred language.

1. Press the i+ key to exit menu from screen.

2. Press the MENU key.

3. Press the ▼ key repeatedly to select the fourth item on the menu.

4. Press the ▶ key twice.

5. Press the ▲ ▼ keys to select the correct language.

6. Press the OK key to confirm selection.

7. Press the MENU key to exit the menu.

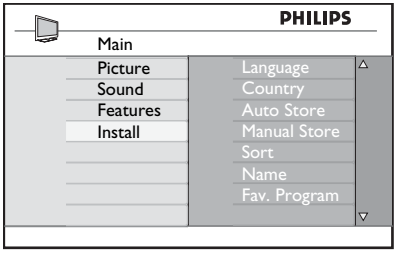
EN

8 Manual Store

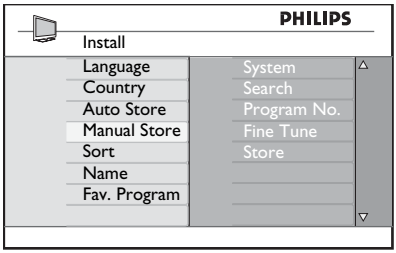
This menu is used to store the programmes one at a time.

1. Press the MENU key.

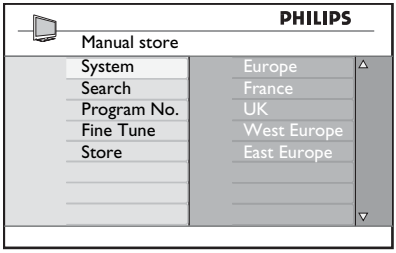
2. Press the ▲ / ▼ keys to select Install, and press the ▶ / OK key to enter the Install menu.



3. Press the ▼ key to select Manual Store, and press the ▶ / OK key to enter Manual Store menu.



4. Press the ▲ ▼ keys to select the items in the Manual Store menu. For information about the options, see the following list.



5. System
   Press the ▲ ▼ keys to select one of the following regions and press the ▶ / OK key to confirm selection.
   - Europe (automatic detection)
   - France (LL' standard)
   - UK (I standard)
   - West Europe (BG standard)
   - East Europe (DK standard)

6. Search
   Press the ▶ key. The search starts. Once a programme is found, the scanning stops and its name is displayed (if available). Go to the next step. If you know the frequency of the required channel, you can enter it directly by using the 0 to 9 keys.

7. Program No.
   Enter the required number by using the 0 to 9 keys or the ▲ ▼ keys.

8. Fine Tune
   If the reception is not satisfactory, adjust by using the ▲ ▼ keys.

9. Store
   To store the changes, press ▶ / OK key. The programme is now stored.

10. Repeat steps 6 to 9 for each programme to be stored.

11. To return to previous menu, press the ◀ key.

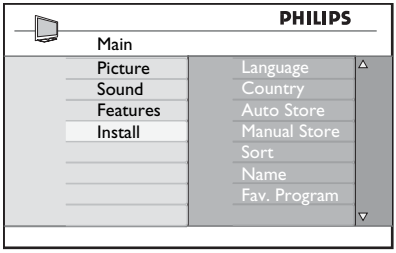
12. To exit the menu, press the MENU key.

9 Programme Sort

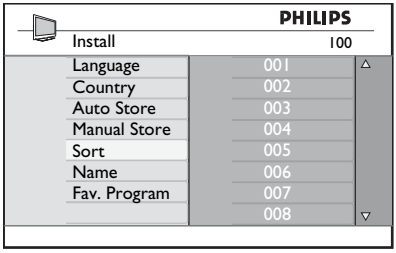
Sort feature allows you to change the programme number for a channel.

1. Press the MENU key.

2. Press the ▲ / ▼ key repeatedly to select Install, and press the ► / OK key to enter the Install menu.

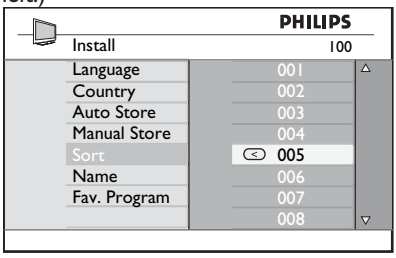


3. Press the ▼ key to select Sort and the ► / OK key to enter sort mode.

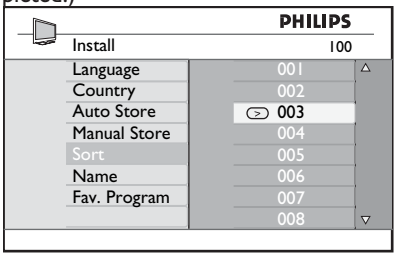


4. Press the ▲ ▼ keys to select the programme number you want to move.

5. Press the ► key to enter sorting mode. (The arrow cursor now points to the left.)



6. Press the ▲ ▼ keys to select the new programme number, and press the ◄ key to confirm your choice. (The arrow points to the right and sorting is completed.)



7. Repeat steps 4 and 6 or each programme number you wish to re-number.

8. To return to previous menu, press the ◄ key.

9. To exit the menu, press the MENU key.

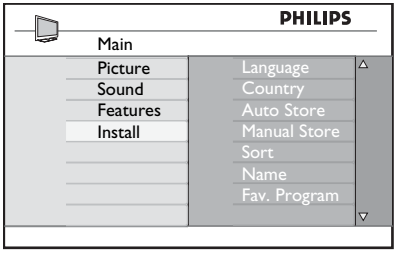
EN

10 Naming Channels

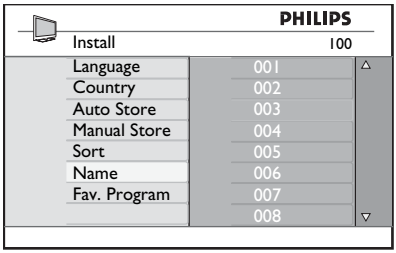
This feature allows you to assign a name to a TV channel.

1. Press the MENU key.

2. Press the ▲ / ▼ key repeatedly to select **Install,** and press the ► / OK key to enter the **Install** menu.



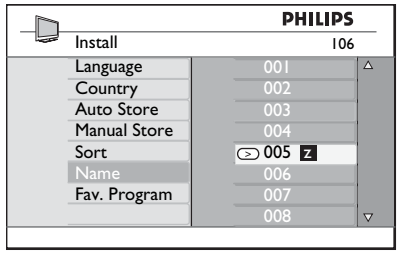
3. Press the ▼ key repeatedly to select **Name,** and press the ► / OK key to enter **Name** mode.



4. Press the ▲ ▼ keys to select the channel you want to name.

5. Press the ► key to move to the first name display area

6. Press the ▲ ▼ keys to select the characters (maximum of 5 characters) and press the ◄ ► keys to move around the name display area.



7. Press ► / OK key until the name appears at the top left hand corner of the TV screen. The name is now stored.

8. To return to previous menu, press the ◄ key.

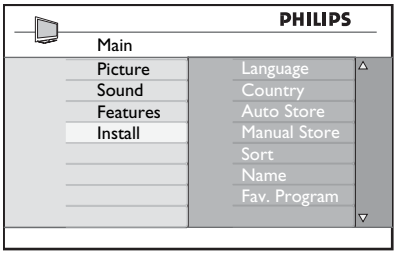
9. To exit the menu, press the MENU key.

11 Storing Your Favourite Channels

This feature allows you store your favourite channels and skip other channels. When a channel is skipped, you cannot access it by using the P – / + keys of the remote control. You can access the programme by using the digit 0 -9 keys only.

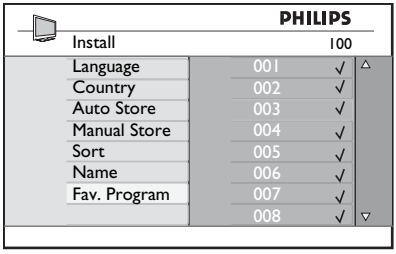
1. Press the MENU key.

2. Press the ▲ ▼ key repeatedly to select Install and the ► / OK key to enter the Install menu.

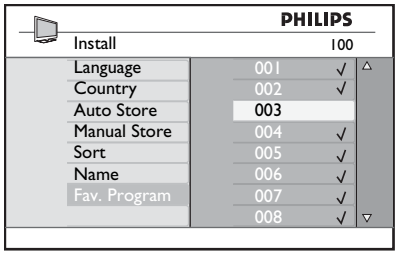


3. Press the ▼ key to select Fav. Program and the ► / OK key to enter Fav. Program list.

4. Press the ▲ ▼ key repeatedly to select programme you want to skip.



5. Press the ► / OK key to skip the channel. The √ on the right of the menu disappears, indicating that the channel is skipped.



6. To return to previous menu, press the ◄ key.

7. To exit the menu, press the MENU key.

Tip: To add a skipped channel to your list of favourite channels, follow these steps:

- Repeat steps 1 to 3 above.
- Press the ▲ ▼ key repeatedly to select the skipped channel that you want to add back to your list of favourite channels.
- Press the ► / OK key to unskip a channel. The √ will appear indicating the channel is now restored.

EN

12 Features

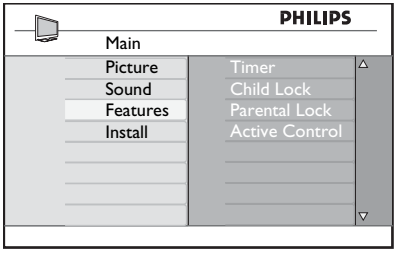
Timer

The Timer feature allows you to set the TV to switch to another channel at a specified time while you are watching another channel.

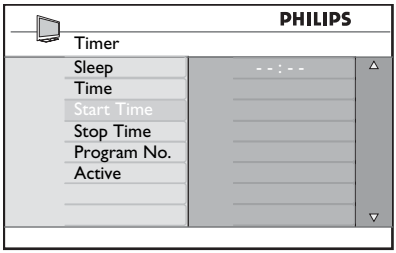
You can also use the timer feature as an alarm to switch on the TV at a specified time from standby mode.

For the timer to function, the set must not be switched off. When the set is switched off, the timer is disabled.

1. Press MENU key.
2. Press ▲ ▼ keys repeatedly to select Features and the ►/ OK key to enter Features menu.



3. Press ► / OK key to access Timer menu.
4. Press ▲ ▼ keys to select a Timer item.



5. Adjust the timer setting by using the ◄, ►, ▲, ▼ or digit 0-9 keys.
6. Press ⏻ key on the remote control to put the TV set in standby mode.

   The TV will automatically come on at the programmed time. If you leave the TV set on, it will change channel at the **Start Time** and will go to standby mode at the **Stop Time**.

The following list describes the timer options:

- Sleep
  To select a time period after which the TV switches to standby mode. Select the **Off** option to deactivate the feature

  Note: During the last minute of a Sleep time setting, an on-screen countdown will be displayed. Press any button on the remote control to cancel the shut down.
- Time
  To enter the current time.
- Start Time
  To enter the time to start the timer.
- Stop Time
  To enter the time to stop the timer.
- Program No.
  To enter the number of the channel for the wake-up alarm.
- Active
  The settings include:

  •Once for a single alarm,

  •Daily for each day,

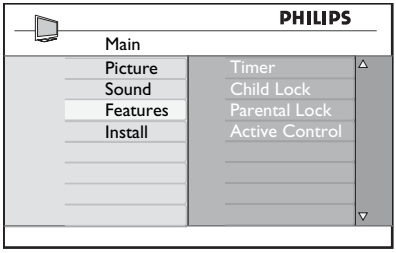
  •Off to cancel.

Parental lock

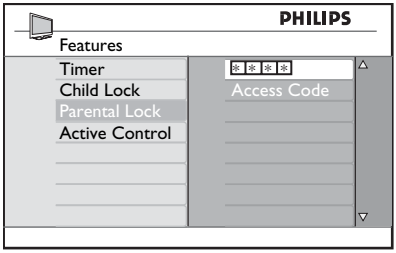
The Parental Lock feature allows you to lock channels to prevent your children from watching certain programmes.

1. Press the MENU key.

2. Press ▲ ▼ keys repeatedly to select Features and the ▶/ OK key to enter **Features** menu.

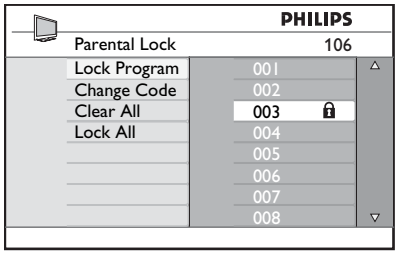


3. Press ▲ ▼ keys repeatedly until Parental Lock is selected and press ▶ / OK key to access Parental Lock mode.



4. Key in the access code 0711 by the Digit 0-9 keys. A message Incorrect will appear. Key in the access code 0711 again.

5. The TV prompts you to change code. Key in your own 4 digit code by the digit 0-9 keys, and confirm the new code. When the new code is confirmed, the Parental Lock menu will appear.



In the Parental Lock menu, use the ▲, ▼, ◀, ▶, Digit 0-9 and MENU keys to access and activate the Parental Lock functions.

The following list describes the options:

- Lock Program to lock an individual program

  Press ▶ key to enter Lock Program mode and the ▲ ▼ keys to select the program to lock or unlock.

  Press the ◀ ▶ keys to lock or unlock the selected program. A keylock symbol 🔒 appears besides the locked channel number.

  To exit from Lock Program and return to Parental Lock menu, press MENU key.

- Change Code to set a new four-digit code. Use the digit 0-9 keys and confirm by keying in the new four-digit again.

- Clear All to clear all locked channels . Press ▶ key to unlock all channels.

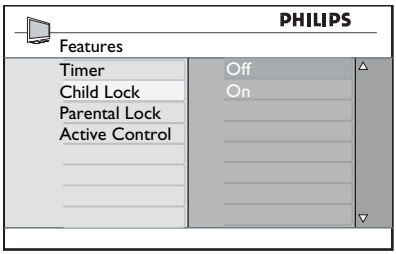
- Lock All to lock all locked channels. Press the ▶ key.

Note: To select a channel that has been locked, key in the Access Code. To unlock the channel, go the Lock Program in the Parent Lock menu and press the ◀ ▶ keys (keylock symbol 🔒 disappears).

Child lock

When you activate the Child Lock, the side or top controls of the TV are locked. The TV can still be operated by using the remote control.

1. Press the MENU key.
2. Press the ▲ ▼ keys repeatedly to select Features, and press and the ►/ OK key to enter Features menu.
3. Press the ▼ key to select Child Lock and press ► / OK key to access Child Lock menu.

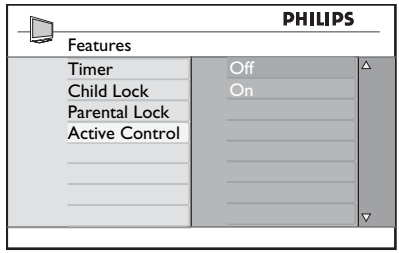


4. Press the ▲ ▼ keys to select On option to activate the child lock. Press the Off option to deactivate the child lock.
5. Press ► / OK key to activate or deactivate ON or OFF option.
6. To return to previous menu, press the ◄ key.
7. To exit the menu, press the MENU key.

Active control

This feature automatically and continuously adjusts the picture setting to provide optimal picture quality in any signal conditions.

1. Press the MENU key.
2. Press the ▲ ▼ keys repeatedly to select **Features** and press the ►/ OK key to enter **Features** menu
3. Press ▲ ▼ keys repeatedly to select Active Control, and press the ► / OK key to enter the Active Control mode.

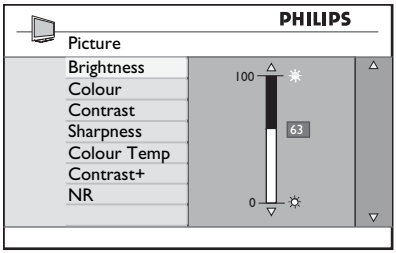


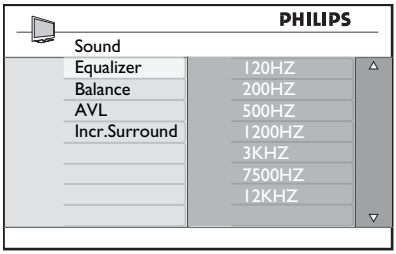
4. Press ▲ ▼ keys to select **On** or **Off** option.
5. Press ► / OK key to activate/deactivate On or Off option.
6. To return to previous menu, press the ◄ key.
7. To exit the menu, press the MENU key.

13 Picture and Sound Settings

This menu adjusts the picture and sound settings.

1. Press the MENU key.
2. Press the ▲ ▼ keys to select Picture or Sound.
3. Press the ▶/ OK key to enter the Picture or Sound menu.





4. Press the ▲ ▼ keys to select a Picture or Sound setting.
5. Press the ▶/ OK key to enter the Picture or Sound setting.
6. Press ▲ ▼ keys to adjust the Picture or Sound setting.
7. To return to previous menu, press the ◀ key.
8. To exit the menu, press the MENU key.

This list summarizes the picture options:

- Brightness
  To change picture brilliance.
- Colour
  To change the colour intensity.
- Contrast
  To change difference between light and dark tones in the TV contrast range.
- Sharpness
  To increases or decreases the sharpness.
- Colour Temp
  To cycle through the following colour settings: Cool (more blue), Normal (balanced) and Warm (more red).
- Contrast+
  To increase the contrast range of the TV. Select On option to activate the Contrast+ feature.
- NR
  To reduce picture noise (white dots) due to weak signal transmission. Select the On option to activate the NR feature.

This list summarizes the sound options;

- Equalizer
  To adjust the sound tone.
- Balance
  To balance the sound on the left and right speakers.
- AVL : (Automatic Volume Leveller)
  To limit sudden increases in sound, especially on programme change or advertising slots.
- Incr. Surround
  Select between Incredible Surround and Stereo when in stereo transmission. Select between Mono and Spatial when in Mono transmission.

14 Smart Picture and Smart Sound

Smart picture

The Smart Picture feature offers the following picture settings: Rich, Natural, Soft, Multimedia and Personal.

Press the SMART button repeatedly to cycle through the settings.

The Personal setting is the setting that you set up by using the Picture menu in the main menu.

The Personal setting is the only setting in the Smart Picture setting that can be changed. All other settings are pre-set.

This list summarizes the smart picture options;

- Rich
  Brilliant and sharp picture settings suitable for bright environment.
- Natural
  Reference mode for living room conditions and average signals.
- Soft
  Intended for bad-quality signals. Suitable for living room viewing.
- Multimedia
  Best for graphical applications.
- Personal
  Pictures settings set up by using the Picture menu in the main menu.

Smart sound

The Smart Sound feature offers feature offers the following sound settings: Movies, Music, Voice, and Personal.

Press the SMART button repeatedly to cycle through the settings.

The Personal setting is the setting that you set up by using the Sound menu in the main menu.

The Personal setting is the only setting in the Smart Sound setting that can be changed. All other settings are pre-set.

This list summarizes the smart sound options;

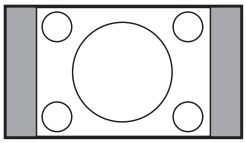
- Movies
  Emphasize sensation to action.
- Music
  Emphasize low tone.
- Voice
  Emphasize high tone.
- Personal
  Sound settings set up by using the Sound menu in the main menu.

15 Picture Format

Pictures can be transmitted in wide screen or 4:3 format. The picture format function allows you to optimize the display. Press the key repeatedly to cycle through the picture formats and select a format.

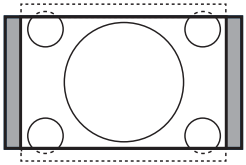
4:3

The picture is reproduced in 4:3 format and a black band is displayed on either side of the picture.



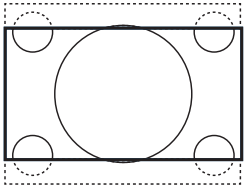
Movie expand 14:9

The picture is shown in 14:9 format, a thin black band remains on both sides of the picture and the top and bottom of the picture is clipped off.



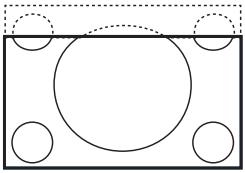
Movie expand 16:9

The picture is enlarged to 16:9 format. This mode is recommended when displaying pictures which have black bands at the top and bottom (letterbox format). In this mode, large parts of the top and the bottom of the picture are clipped off.



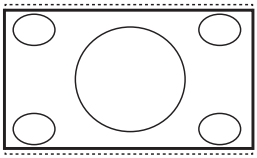
Subtitle zoom

This mode is used to display 4:3 pictures using the full surface of the screen leaving the sub-titles visible. Part of the top of the picture is clipped off.



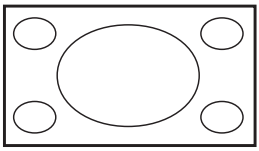
SuperZoom

This mode is used to display 4:3 pictures using the full surface of the screen by enlarging the sides of the picture.



Widescreen

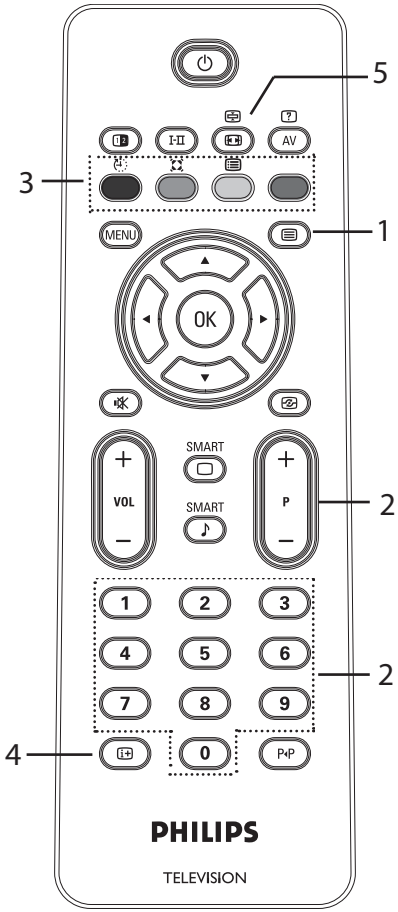
The picture is displayed in the original proportions of images transmitted in 16:9 format.



Note**:** If you display a 4:3 picture in widescreen mode, the picture is stretched horizontally.

16 Teletext

Teletext is an information system broadcast by certain channels which can be consulted like a newspaper. It also offers access to subtitles for viewers with hearing problems or who are not familiar with the transmission audio language



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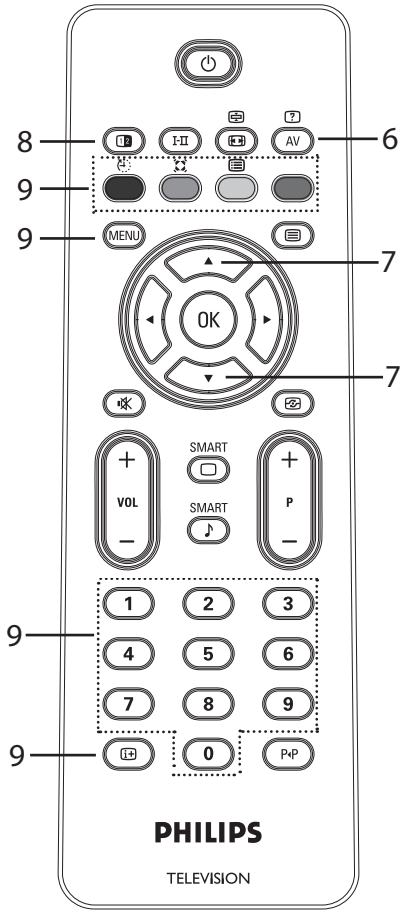
1. Teletext On/Off
   To switch on the teletext display. A contents page appears with a list of items that can be accessed. Each item has a corresponding 3 digit page number. If the selected channel does not broadcast teletext, the indication 100 is displayed and the screen remains blank. To exit teletext, press the key again.

2. Select a page
   Enter the number of a teletext page by using the 0 to 9 keys or P –/+ keys. For example:, to access page 120, enter 120. The number is displayed at the top left corner of the screen. When the page is located, the counter stops searching and the page is displayed. Repeat this operation to view another page. If the counter continues to search, the page is not being transmitted. If this happens, select another number.

3. Direct access
   Colour areas are displayed at the bottom of the screen. The 4 colour keys are used to access the items or corresponding pages. The colour areas flash when the item or the page is not yet available.

4. Contents
   This returns you to the contents page (usually page 100 or hit list menu).

5. Page hold
   Certain pages contain sub-pages which are automatically displayed successively. This key is used to stop or resume sub-page progression. The indication appears top left. Use the ◄ ► keys to select previous or next sub-page..



6. Hidden information AV
   To display or hide the concealed information such as solutions to games or riddles

7. Enlarge a page
   This allows you to display the top or bottom part of the page. Pressing it again will return the page to normal size.

8. Picture/Teletext
   - Press the key.
   - Press the key to show Teletext on the right and the picture on the left of the screen.
   - Press the key to return to a full teletext mode.
   -Press the key to return to a full screen picture.

9. Favourite pages
   Instead of the standard colour areas displayed at the bottom of the screen, you can store 4 Favourite pages on the first 40 channels which can then be accessed using the coloured keys (red, green, yellow, blue). Once set, these Favourite pages will become the default every time teletext is selected. To store the Favourite pages, proceed as follows:
   - Press the MENU key to change to Favourite page mode.
   - Use the 0/9 keys to enter the teletext page that you want to store as a Favourite page.
   - Press and hold the colour key of your choice for about 5 seconds. The page is now stored.
   - Repeat for the other colour keys. To exit Favourite page mode, press the MENU key.

To exit teletext mode, press the key.

To clear Favourite pages, press and hold the key for about 5 seconds.

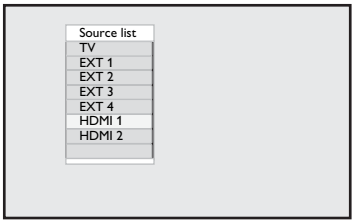
17 Using the TV as a PC Monitor

Your TV can be used as a computer monitor.

NOTE: A PC connection is only available via HDMI connector. VGA connection is not supported.

Connecting a PC to the TV

1. Connect the DVI output of your PC to the HDMI 1 or HDMI 2 connector of the TV. Use a HDMI to DVI cable if the DVI output is to be connected.
2. Connect the audio cable to the PC's audio jack and to the L / R audio jacks (EXT3) of the TV.
3. Press the AV key to display the source list and use the ▲ ▼ keys to select HDMI1 or HDMI2.



4. Press the ▶ / OK key to switch to the selected source.

Adjusting TV settings in PC Mode

1. Press the MENU key.
2. Press the ▲ ▼ keys to select Picture, Sound or Features, and press the ▶ / OK key to enter the selected item menu
3. Press the ▲ ▼ keys to select the settings and the ◀ ▶ key to select or adjust setting.
4. To return to previous menu, press the ◀ key.
5. To exit the menu, press the MENU key.

Picture menu for PCs

The picture menu comprises the following features: Brightness, Contrast, Colour Temp, Contrast+ Horizontal Shift and Vertical Shift.

The Brightness, Contrast, Colour Temp, Contrast+ features work in the same way as described in *Picture and Sound Settings* on page 17.

The Horizontal Shift feature allows you to adjust horizontal position of the image.

The Vertical Shift feature allows you to adjust vertical position of the image.

Feature menu for PCs

The Features menu comprises following features: Mode, Selection and Format.

When you connect a PC that supports resolutions of 480p or 720p, the Mode Selection feature is available in the Features menu. The Mode Selection feature allows you to select between the PC and HD mode.

The Format feature works in the same way as described in *Picture Formats* on page 19.

Note: When you use HDMI to connect your PC to the TV you might need to adjust the resolution or settings of the PC. In some situations you may see a dialogue box on screen and need to press OK to continue watching the TV. Please refer to the user manual of the PC for information about how to adjust the resolution or settings of the PC.

18 Using the TV in HD Mode

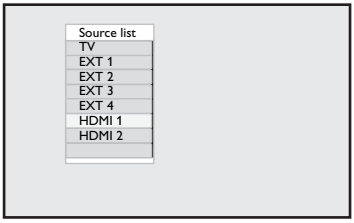
If you are using equipment that can produce High Definition (HD) video signals, the HD mode allows you to enjoy clearer and sharper pictures

Connecting HD equipment

1. Connect the HDMI or DVI output of your HD equipment to the HDMI 1 or HDMI 2 connector of the TV.
   - Use a DVI to HDMI cable if DVI output is connected.
   - Alternatively, connect the Component Video Outputs (Y, Pb, Pr) of the HD equipment to the Component Video Inputs (Ext 4) of the TV.

2. If you are using a DVI cable, connect the audio cable to the audio jack of the HD equipment and to the L/R audio jacks (EXT3) of the TV .

3. Press the AV key to display Source List, and press the ▲ ▼ keys to select one of the following sources:
   - HDMI1 or HDMI2 if you using an HDMI connection
   - EXT 4 if you using a YPbPr connection



4. Press the ▶ / OK key to switch to the selected source.

Controlling TV settings in HD mode

1. Press the MENU key.
2. Press the ▲ ▼ keys to select a Picture or Sound setting.
3. Press the ▶/ OK key to enter the Picture or Sound setting.
4. Press ▲ ▼ keys to adjust the Picture or Sound setting.
5. To return to previous menu, press the ◀ key.
6. To exit the menu, press the MENU key.

Picture menu for HD mode

The picture menu comprises the following features: Brightness, Contrast, Colour Temp, Contrast+ Horizontal Shift and Vertical Shift.

The Brightness, Contrast, Colour Temp, Contrast+ features work in the same way as described in *Picture and Sound Settings* on page 17.

The Horizontal Shift feature allows you to adjust horizontal position of the image.

The Vertical Shift feature allows you to adjust vertical position of the image.

Sound menu for HD mode

The picture menu comprises the following features: Equalizer, Balance, AVL and Incredible Surround.

The sound features work in the same way as as described in *Picture and Sound Settings* on page 17.

Features menu for HD mode

The Features menu comprises following features: Timer, Child Lock, Parental Lock, Mode Selection and Active Control

With the exception of Mode Selection , the features work in the same way as described in *Features* on pages 14-16.

When you connect HD equipment that supports resolutions of 480p or 720p, the Mode Selection feature is available in the Features menu.

The Mode Selection feature allows you to select between PC and HD mode.

Supported formats for HD mode

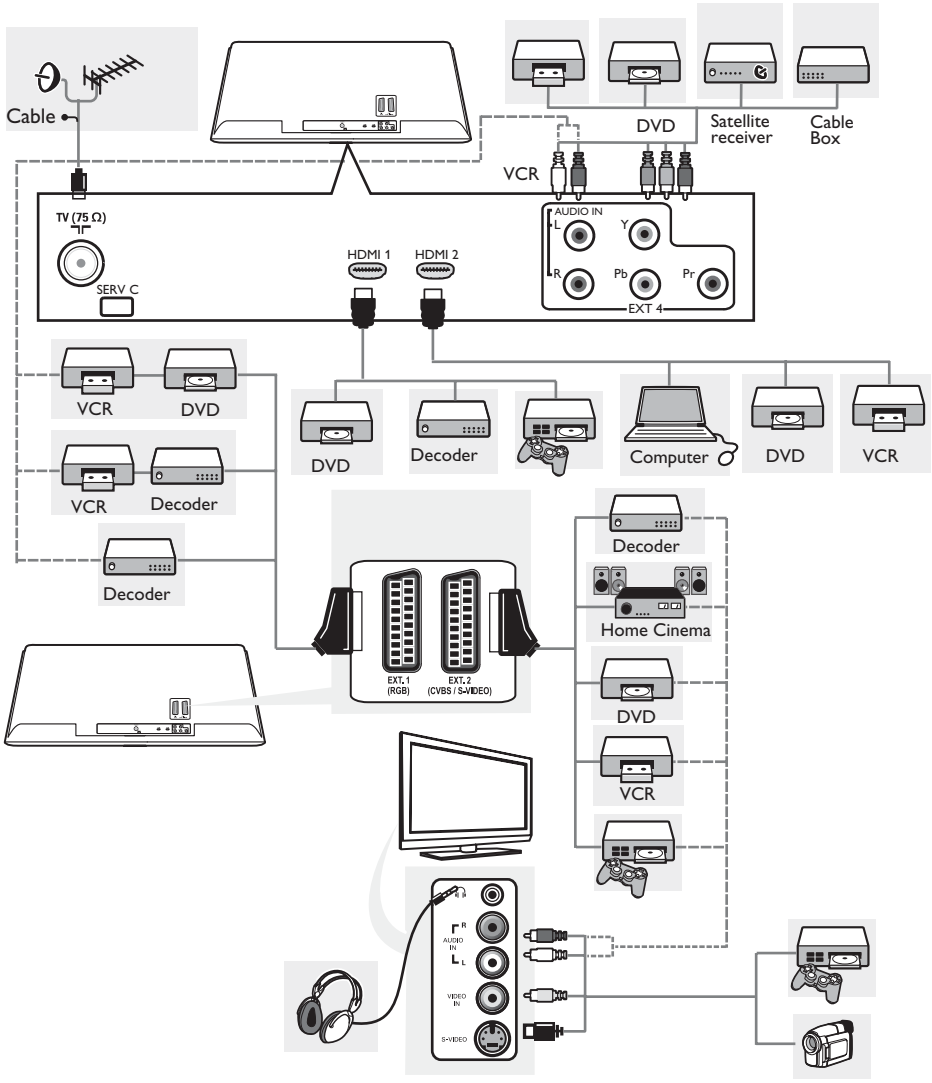
The following standard definition (SD) formats are supported: 480i, 576i

The following HD formats are supported: 480p, 480i, 576p, 576i, 720p, 1080i

Note: Your Philips TV is HDMI compliant. If you do not get a good picture, please change the video format on your device (DVD player, cable set-top box, etc.) to a standard format. For example, for DVD players, select 480p, 576p, 720p or 1080i. Please note that this is not a defect of the TV set.

19 Connecting Other Equipment

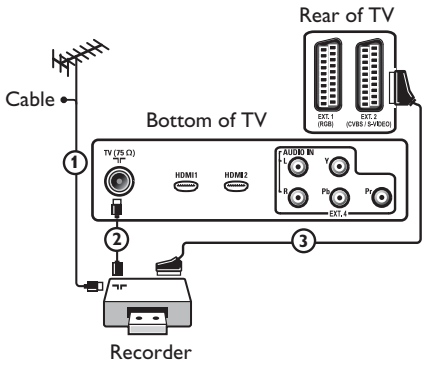
Overview of connections



Connecting a VCR or DVD Recorder

Connecting with a Eurocable

1. As shown in the figure below, connect aerial cables 1 and 2, and connect Eurocable 3.
2. Press the AV key on the remote control display Source list.
3. Press the ▼ key repeatedly to select EXT2 and press the ▶ / OK key to confirm your selection.

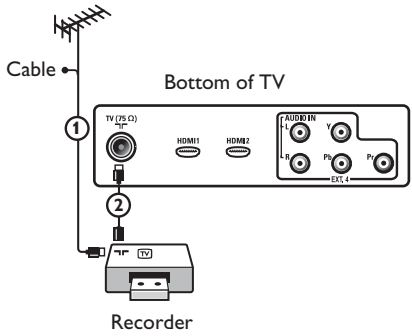


Connecting with an aerial cable

As shown in the figure below, connect aerial cables 1 and 2.

1. Tune in the recorder's test signal and store the test signal in programme number 0.

   For information, see *Manual Store* on page 10 and the user manual of your recorder.



Connecting a decoder and a VCR

1. As shown in the figure below, connect a Eurocable to your decoder and to the euroconnector port of your recorder. For information, see the user manual of your recorder.

   Alternately, you can connect your decoder directly to EXT1 or EXT2 with a Eurocable.

Warning: Do not place the recorder too close to the TV because some recorders are susceptible to signals from the display. Place the recorder at least half a meter away from the screen.

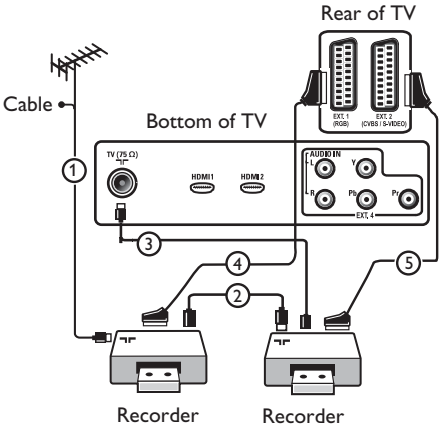
Connecting two VCRs, a VCR and a DVD recorder

Connecting with Eurocables

1. As shown in the figure below, connect aerial cables 1 and 2.
2. Connect the VCRs or DVD-recorder to EXT1 and EXT2 with the Eurocables 4 and 5.
3. Press the AV key on the remote control display Source list.
4. Press the ▼ key to select EXT1 or EXT2 and press the ► / OK key to confirm your selection.

Connecting with aerial cables only

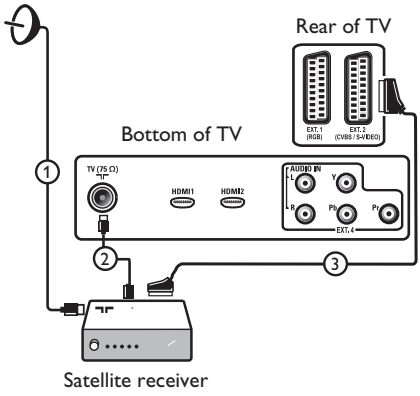
1. As shown in the figure below, connect aerial cables 1, 2 and 3.
2. Tune in the recorder's test signal and store the test signal in programme number 0. For information, see *Manual Store* on page 10 and the user manual of your recorder.



Connecting a satellite receiver

Connecting with a Eurocable

1. As shown in the figure below, connect aerial cables 1 and 2.
2. Connect the satellite receiver to EXT1 and EXT2 with Eurocable 3.
3. Press the AV key on the remote control display Source list.
4. Press the ▼ key to select EXT1 or EXT2 and press the ► / OK key to confirm your selection.



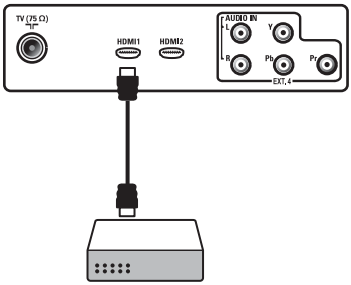
Connecting with component video connectors

For information about how to connect a satellite box by using Component Video connectors, see *Connect a DVD player, a satellite receiver or a cable box* on page 28.

Connecting a DVD player, cable box or game console

Connecting With an HDMI Connector

1. As shown in the figure below, connect your equipment with the HDMI connector.
2. Press the AV key on the remote control. The source list is displayed.
3. Press the ▼ key to select HDMI1 or HDMI2 and press the ► / OK key to confirm your selection.

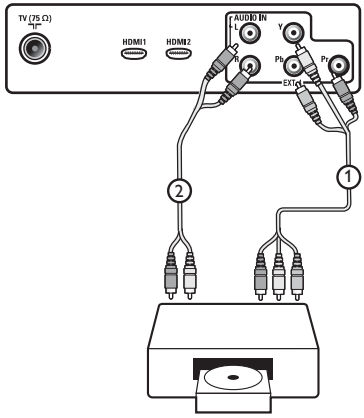


Connect a DVD player, satellite receiver or cable box

Connecting With Component Video Connectors

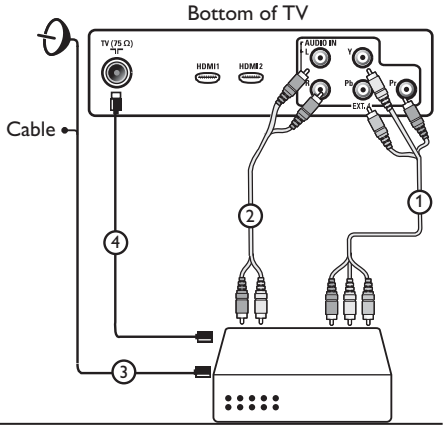
1. As shown in the following figure, connect the three separate component video cables (1) to the YPbPr jacks on the DVD player and to the Y (yellow), Pb (blue) and Pr (red) jacks of EXT4 on the TV.
2. Connect the audio cable to the DVD's audio L and R jacks and to the L/R AUDIO jack of EXT4 (2).
3. Press the AV key on the remote control. The source list is displayed.
4. Press the ▼ key to select EXT4 and press the ► / OK key to confirm your selection.

Bottom of TV



5. As shown in the following figure, if you are using a cable box and/or a satellite receiver, also connect the cable TV cable and/or the satellite aerial cable (3) to the aerial cable (4).

Bottom of TV



Cable colours

Cables are often colour coded. Connect like colour with like colour. For example, connect red to red.

The labels for the component video sockets can differ depending on the DVD player connected.

Although the abbreviations may vary, the letters B and R stand for the blue and red component signals, respectively. The letter Y indicates the luminance signal.

Refer to the user manual of your DVD player for definitions and information about connections.

For optimal viewing, switch your equipment to the highest supported display mode.

Warning: If you notice problems such as scrolling images, wrong colours, no colour or no picture, verify that your TV is connected correctly.

Verify also that the resolution and the signal standard of the peripheral equipment is correct.

For information about the resolution and the signal standard of the peripheral equipment, see the user manual for the equipment.

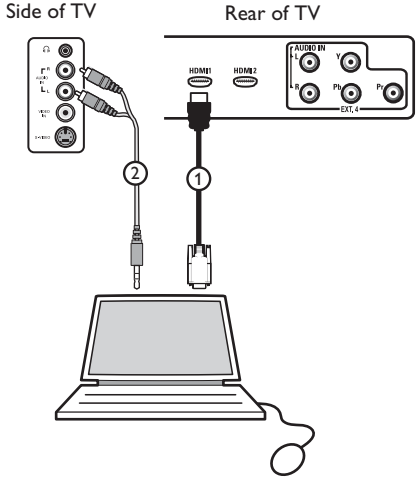
Connecting a PC

Note: The digital output of the PC can be connected via DVI to HDMI cable. Connection by VGA is not supported.

Before you connect your PC to the TV, configure your PC with a monitor refresh frequency of 60 Hz.

Connecting a PC with a DVI connector

1. As shown in the following figure, connect your PC to the TV with a DVI to HDMI cable (1).
2. Connect the audio cable to the audio jack on the PC and to the L/R AUDIO jack on the EXT3 of the TV (2).
3. Press the AV key on the remote control. The source list is displayed.
4. Press the ▼ key to select HDMI1 or HDMI2 and press the ► / OK key to confirm your selection.



Supported PC resolutions

640 x 480, 60 Hz	800 x 600, 75 Hz
640 x 480, 72 Hz	800 x 600, 85 Hz
640 x 480, 75 Hz	1024 x 768, 60 Hz
640 x 480, 85 Hz	1024 x 768, 70 Hz
800 x 600, 60 Hz	1024 x 768, 75 Hz
800 x 600, 72 Hz	1024 x 768, 85 Hz

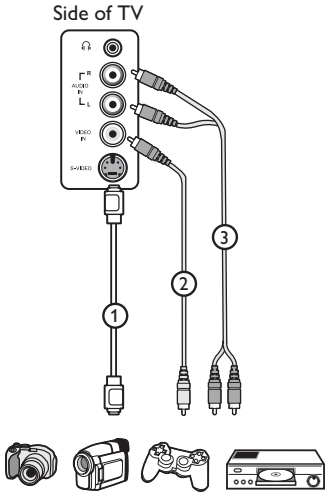
For LCD TVs only

1280 x 768, 60 Hz
1280 x 1024, 60 Hz
1360 x 768, 60 Hz

Connecting a camera, camcorder or game console

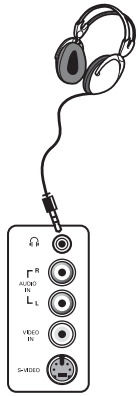
1. As shown in the figure below, connect your camera, camcorder or game console in at the side of the TV.
2. Press the AV key on the remote control. The source list is displayed.
3. Press the ▼ key to select EXT3 and press the ► / OK key to confirm your selection.
   - For mono equipment, connect to VIDEO (2) and AUDIO L (3)
   - For stereo equipment, connect both AUDIO L and AUDIO R (3)
   - To obtain S-VHS quality with an S-VHS camcorder connect the S-VHS cables with the S-VIDEO input (1) and AUDIO L / R inputs (3)

Warning: Do not connect cables (1) and (2) at the same time. Connecting both cables (1) and (2) can cause picture distortion.



Connect headphones

1. As shown in the figure below, insert the headphones plug into the headphone socket at the side of the TV.
2. Press the AV key on the remote control. The source list is displayed.
3. Press the ▼ key to select EXT3 and press the ► / OK key to confirm your selection.



The headphone socket has a 3.5 mm jack.

The headphone impedance must be between 8 and 4000 Ohm.

TIP: Press the key on the remote control to switch off the sound from loudspeakers of the TV. To switch on the sound, press the key again.

20 Troubleshooting

The following table describes some common problems you can encounter when using your TV. Consider the proposed solutions before you call for service.

Symptom	Possible solutions
No display on screen	• Verify that the power cord is properly connected into the mains socket and into the TV. • If the power cord is correctly inserted but there is no power, perform the following steps: • Disconnect power cord or wall plug • Wait for 60 seconds and then re-insert plug • Switch on the TV • Press the ⏻ key on the remote control
Poor reception (snow)	• Verify that the aerial is connected to the TV and to the wall aerial socket. • Manually tune your picture as described in *Manual Store* on page 10. • Verify that you have chosen the right TV system. For information about TV systems, see *Manual Store* on page 10. • Check the signal strength by pressing the i+ key
No picture	• Verify that the supplied cables are connected properly • Verify that you have selected the correct source. • Verify that the child lock is not activated.
No sound on certain channels	• Ensure that you have chosen the right TV system. For information about TV systems, see *Manual Store* on page 10.
No sound	• Verify that the volume is not at the minimum. • Verify that the mute (🔇) mode is not on. If mute mode is on, press the 🔇 key to turn it off. • Verify that the TV is connected correctly to the peripheral equipment.
Foreign language in the TV menus	• Press the i+ key to exit the menu. • Press the MENU key. • Press the ▼ key repeatedly to select the fourth item on the menu. • Press the ▶ key twice. • Press the ▲ ▼ keys to select correct language. • Press the OK key to confirm selection. • Press the MENU key to exit menu.

Symptom	Possible solutions
TV not responding to the remote control	• Move closer to the receiver at the front of the TV screen • Check the +/- direction of the batteries in the remote control • Change the batteries in the remote control
One or a few tiny spots on the screen that do not change colour along with the video picture	• This symptom is not a problem. The liquid crystal panel is built with very high precision technology giving you the fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of red, blue, green or black. • This does not affect the performance of the set.
Intermittent or flickering picture in HD mode	• Noise is displayed if the digital equipment fails. Digital equipment can include a DVD player or set-top box. Check the user manual of the digital equipment you are connecting. • Use a standard-compliant (high-quality) HDMI to DVI cable.
No sound or picture but the red light on the front panel is on	• Press the ⏻ key on the remote control.
PC modes do not work	• Check whether connections are correct. (See page 29.) • Check whether the source is correctly selected by pressing the AV button to enter the source list and selecting the correct source. • Check whether you have configured the computer to a compatible display resolution • Check the graphic card setting of the PC.
S-Video colour becomes faint	• Check whether the SVHS cable is properly connected. • Press the **P +** key on the remote control to do a channel up, and then press the **P –** key to do a channel down.
Black bar on the top and bottom of the screen in PC mode	• Change the PC refresh rate to 60 Hz.

21 Reference Table of Countries

The following table lists the countries and their abbreviations.

Abbreviation	Country
A	Austria
B	Belgium
CH	Switzerland
D	Germany
DK	Denmark
E	Spain
F	France
FL	Finland
GB	England
GR	Greece
I	Italy
IRL	Ireland
L	Luxembourg
N	Norway

Abbreviation	Country
NL	Netherlands
P	Portugal
S	Sweden
CZ	Czech Republic
H	Hungary
HR	Croatia
PL	Poland
RO	Romania
RUS	Russia
SK	Slovakia
SLO	Slovenia
TR	Turkey
- - -	Others

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